

REMARKS

Claim Status

Claims 7-29, 31 and 32 remain pending in the present application.

Claims 1-6 have been canceled without prejudice to the subject matter recited therein. We reserve the right to file one or more continuing or related applications claiming this subject matter. We expressly traverse the outstanding rejection of these claims; the claims have been canceled merely to simplify issues for this amendment.

Claims 10-13, 17, 18, 20, 21, 23, 26, 27 and 32 have been amended in an editorial fashion and not in response to the art or any formal requirement. For example, the terms “the steps of” (claim 11) and “the step of” (claim 27) have been removed.

Claim 10 has also been amended to change the term “map” to “representation of a geographical area,” which is believed to be a broader description.

Claim 11 has also been amended to change the term “extracted” to “reading.” This is a stylistic change, and is not made to overcome the art or to comply with any formal requirement.

Claim 24 has been amended to remove the “means-plus-function” format, and to recite alternative features (e.g., “optical scan data”). No forfeiture of equivalents is intended; indeed, claim 24 is now believed to be in a broader form.

Claim 30 has been canceled without prejudice. In this regards, claim 31 has been amended in independent form and generally includes the features of now canceled claim 30. No forfeiture of equivalent arrangements is intended.

Specification Amendments

The specification has been amended to include patent numbers and correct minor typos. We submit that no new matter has been added.

Art-Based Rejections

Claims 7-29, 31 and 32 stand rejected over U.S. Patent No. 5,848,373 (hereafter referred to as “the DeLorme patent”) in view of U.S. Patent No. 6,748,362 (hereafter referred to as “the Meyer patent”). We expressly traverse these rejections.

Claim 7

Claim 7 recites an apparatus including an input device to capture an image of a map. The map includes a digital watermark embedded therein. The digital watermark includes location information associated with the map. Software instructions, stored in memory of the device, obtain the location information from the watermark in the captured image. The location information – retrieved from the map itself – is compared to GPS data. A correlation of the information is then output.

The DeLorme patent is not understood to teach or suggest machine-capturing image data of the map itself and obtaining information there from.

Instead, the DeLorme patent suggests receiving GPS data for a current location, and relying on a user to “intuitively” locate that position on a map. (See, e.g., Fig. 1 and Cols. 19, line 41 – Col. 20, line 7). For example, in the DeLorme patent at Fig. 1, a user reads map grid location (C3) from a GPS device and then uses his finger to locate the corresponding grid location (grid C3) on the map.

The DeLorme patent is not understood to teach or suggest steganographically embedded location information in a map, and using this steganographically embedded map to help identify a location.

The Meyer patent does not remedy these deficiencies. The Meyer patent is cited for teaching a digital watermark. But the Meyer patent is silent on watermarking location information in the manner contemplated in claim 7. Moreover, there is no motivation or suggestion in either document that the references should be combined, e.g., no discussion of watermarking in the DeLorme patent and no discussion of location information carried by watermarks in the Meyer patent. (We remain curious on how to use the primary techniques discussed in Meyer patent to implement the invention. For example, the Meyer patent seems to focus on embedding compressed digital files, and not on

embedding location information in the physical map of claim 7. Clarification is requested if the Office maintains this rejection.)

We respectfully submit that claim 7 should be allowed.

Claim 20

The DeLorme patent fails to teach or suggest the combination as recited in claim 20.

The only mention we see of a “sign” is in Figs. 14A, 14D, 14E (“First St.” and “Main St.” and Figs. 15A and 15E (“Stop” sign). But there is no teaching of capturing an image of the First St. or the Stop sign to decode information there from, or that the sign is even encoded with digital watermarks.

The Meyer patent is deficient in these regards also. The Meyer patent seems focused on encoding compressed digital files – not encoding, e.g., street signs.

Claim 20 should be allowed because the applied references fail to teach or suggest each of the claimed features.

(We noticed that the Office Action seems to discuss terms not recited in claim 20, e.g., “map” -- see the Office Action at page 9. These and other terms should not be read into claim 20. This position applies to the other claims in which the Office Action discusses terms not recited therein.).

Claim 14

Similar to the discussion above with respect to claim 20, the DeLorme patent and the Meyer patent each fail to teach or suggest a sign having plural bit data encoded thereon in the form of a digital watermark, the data comprising a unique identifier.

Claim 14 should be allowed.

Claim 11

Claim 11 requires that a digital watermark be read from a map including embedded digital watermarks.

The DeLorme patent is not understood to teach machine-reading information from the map, let alone reading digital watermarks from the map which include location

information to uniquely identify the map. The fact that the Meyer patent discusses watermarking compressed digital files is not helpful to suggest that a map should be so marked.

Moreover, the applied documents fail to teach or suggest comparing watermark location information to a physical location, and providing feedback to correlate the watermark location information and the physical location.

We respectfully request that claim 11 be allowed.

Claim 12

Claim 12 recites a map divided into a plurality of areas, with each area comprising at least one embedded digital watermark including location information for the respective area.

The office concedes on page 7 of the Office Action that the DeLorme patent does not teach that the areas are embedded with a watermark including location information for the respective area.

The Meyer patent is also deficient in this regard. The Meyer patent encoding is not understood to embed location information into different – and respective – regions of an image.

The combination recited in claim 12 is not disclosed or suggested in the applied references. Thus, claim 12 should be allowed.

Claim 24

Like so many of the previously discussed claims, claim 24 considers a map including digital watermarks embedded therein. And, like claim 12 discussed immediately above, the map is divided into a plurality of areas, with each area comprising at least one embedded digital watermark including location information for the respective map area. Here, claim 24 is directed to an apparatus capable of reading the watermarks from the map.

The DeLorme patent does not consider such.

The cited passages of the Meyer patent do not teach such. In addition, the focus of the Meyer patent seems to be on digital files, not receiving optical scan data

corresponding to at least a portion of a respective map area, where the optical scan data includes a watermark including location information, in combination with the other features of claim 24.

Remaining claims

The remaining independent claims should also be allowed based on reasons analogous to those discussed above. The dependent claims are also believed to be patentable in their own right. Favorable consideration is requested.

Information Disclosure Statement

It appears that the Examiner has crossed out several documents from our previous 1449 forms. We remain curious as to why they were crossed out, particularly since copies were provided for the Examiner's consideration.

We are again citing and providing these documents and we ask that they be considered by the Examiner.

Conclusion

The application is believed to be in condition for allowance. An early notice of allowance is respectfully requested. (Applicants need not belabor the other shortcomings of the art at this time.).

Nevertheless, the Examiner is invited to telephone the undersigned at 503-469-4685 if any issue remains.

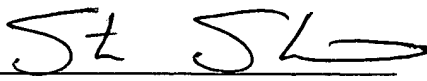
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Respectfully submitted,

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